



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,596	02/12/2001	Nathanicl M. McCully	07844-413001 / P377	9487

21876 7590 01/25/2007
FISH & RICHARDSON P.C.
P.O. Box 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER

STEVENS, ROBERT

ART UNIT PAPER NUMBER

2162

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.	Applicant(s)	
09/782,596	MCCULLY, NATHANIEL M.	
Examiner	Art Unit	
Robert Stevens	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20061027</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Office substantially maintains the previous rejections of the claims under 35 USC §103(a), in light of the amendment. However, the Office sets forth new rejections of the claims under 35 USC §§101, 112-1st and 2nd paragraphs.

Response to Arguments

2. Applicant's arguments filed 10/27/2006 have been fully considered but they are not persuasive.

Regarding claim 1, Applicant asserts on page 7 that the cited references (Hollett and Verhelst) do not disclose demarcating a region including a grid line and one or more subsequent lines, demarcating an arrangement region if the text height is greater than a grid dimension, performing that demarcation without modifying existing grid lines, and arranging characters according to a coordination line. Applicant further asserts that these arguments apply to the remaining claims, 2-16, based upon claim dependency or similar recitation language/features.

The Office respectfully disagrees. Figure 4 of Hollett may be reasonably characterized as a grid (without each grid cell dimension being displayed). The area demarcated for "TEXT3" shows that a total of 3 lines have been used, a current plus two subsequent lines, to demarcate a grid region to accommodate the larger height of

Art Unit: 2162

"TEXT3" (when contrasted to the height of "TEXT4"). It is further noted that since the grid cells/lines are transparent that no modification of the grid itself was necessary.

Finally, the "TEXT3" string appears in the demarcated region of Figure 4, as centered upon that region. Substantially similar rationale applies to the remaining claims, 2-16.

For at least these reasons, the Office asserts the rejections of the claims as set forth below.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 1-16 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter.

To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application with useful, concrete and tangible result.

A practical application can be either physical transformation or a useful, concrete and tangible result.

Regarding independent claim 1: This claim essentially recites a height determination arrangement region demarcation, coordination line setting and arranging characters within the demarcated region. These steps encompass subject matter that occurs entirely within the internals of a computer. Therefore, the claim does not produce a useful result. (One way to correct this is to add a step reciting the displaying of the arrangement region.) Additionally, the terms “computer program product” and “machine-readable medium” were not defined in the specification. These terms as recited together in the preamble (or “machine-readable medium” by itself) may be reasonably interpreted as encompassing nonstatutory subject matter, such as a transmission medium or a carrier wave. As such the claim further encompasses subject matter that is non-tangible (e.g., a carrier wave). (One way to correct this is to recite a “computer-readable recording medium comprising ...”, because the Office notes that this terminology is defined in the specification and excludes transmission media.)

Independent claim 8 is substantially similar to claim 1, and therefore likewise rejected.

Regarding independent claims 15 and 16: These claims essentially recite a dimension determination, an arrangement region demarcation, a coordination line setting and an arranging of characters within the demarcated region. These steps encompass subject matter that occurs entirely within the internals of a computer.

Art Unit: 2162

Therefore, the claim does not produce a useful result. (One way to correct this is to add a step reciting the displaying of the arrangement region.)

Claims 1, 8, 15 and 16, and other claims that depend on them, are not patent eligible because the invention recited therein does not produce a useful, concrete and tangible result.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claims 15-16 are rejected under 35 U.S.C. 112, first paragraph**, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 15 and 16: Each of these claims recites determining whether a maximum dimension exceeds a specified grid dimension, and then selecting a current and a subsequent grid line. It is noted, however, that such actions have been described

in the specification as taking place only when a height dimension exceeds a certain threshold (and not for any/all dimensions). Thus the claim has only been enabled for a height dimension, and not for other dimensions.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 15-16 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 15 and 16: These claims appear to be missing an essential step/element. Each of these claims recites a determination limitation. However, it is noted that the result of that determination is never used. The ensuing limitation recites the selection of both a current and a subsequent grid line. This ensuing limitation is thus being claimed as taking place regardless of the result of the determination limitation. Further regarding claim 15, there is a lack of antecedent basis as to "the selected plurality of grid lines" at lines 13-14. It is unclear whether this phrase indicates the current and subsequent grid lines or other grid lines.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1-16 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Verhelst et al (US Patent No. 5,068,809, filed Mar. 1, 1990 and issued Nov. 26, 1991, hereafter referred to as "Verhelst") in view of Hollett (US Patent No. 4,891,770, filed Jul. 27, 1987 and issued Jan. 2, 1990, hereafter referred to as "Hollett").

Independent claim 1 states:

A computer program product, stored on a machine-readable medium, comprising instructions operable to cause a programmable processor to:
determine the height of text consisting of a plurality of characters to be arranged within a current line in a grid displayed on a display device;
demarcate an arrangement region that includes the current line and at least one subsequent line if the height of the text is larger than a specified dimension for the grid without modifying the displayed grid;
set a coordination line within the management region according to a selected coordination mode; and
arrange the plurality of characters within the arrangement region while coordinating the plurality of characters with the coordination line.

Regarding claim 1, Verhelst discloses determining the height of text arranged/displayed in the grid of Figure 12, illustrating text and grid lines of differing point size, in the context of the discussion on ascender and descender values for character fonts in column 12 line 65 – col. 13 line. Verhelst further shows adjusting grid

Art Unit: 2162

line spacing based upon a dimension threshold in Figure 12, showing a variation in grid line spacing, as taken in context of the discussion of column 13 lines 14-29 concerning adjusting grid line spacing based upon the equation set forth at column 12 line 67 – column 13 line 7. Verhelst teaches selecting coordination modes at column 13 lines 30-38, discussing the setting a “base line grid” property. Verhelst further teaches the arrangement of a plurality of characters in association with a coordination line in Figure 12, showing the arrangement of text in association with grid lines (i.e., baselines), noting that Verhelst took into account ascender and descender values (i.e., character height above/below a baseline) for character fonts in col. 12 lines 65-67.

However, Verhelst does not explicitly disclose demarcating a region comprising at least two lines (i.e., current line plus at least one subsequent line) in Figure 12. Hollett, though, teaches demarcating a text region encompassing at least two lines in Figure 4, showing, for example, text region 4 encompassing three lines. Additionally, Hollett discusses calculating a text region extending 10 characters up/down at column 4 lines 11-23, it being noted that each vertically arranged (i.e., up/down) character equates to a line. The area demarcated for “TEXT3” shows that a total of 3 lines have been used, a current plus two subsequent lines, to demarcate a grid region to accommodate the larger height of “TEXT3” (when contrasted to the height of “TEXT4”). It is further noted that since the grid cells/lines are transparent that no modification of the grid itself was necessary.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hollett for the benefit of Verhelst, because to do so

Art Unit: 2162

would have allowed one to automatically draw blocks of text to an optimum size, as taught by Hollett in the Abstract. These references were all applicable to the same field of endeavor, i.e., electronic document formatting.

Regarding claims 2-5, Verhelst discloses a grid having a plurality of lines displaying English characters in various font point sizes in Figure 12, showing an adjustable grid displaying English characters. It is noted that the language (i.e., English, Chinese, Japanese, Korean, etc.) of the text characters presented in the grid was an obvious variant to one skilled in the art at the time of the invention. Verhelst further discusses grid orientation (i.e., movement) in column 2 lines 34-41, and grid font point dimension in Figure 4 and column 12 lines 47-58, which discusses selection of grid properties including, inter alia, size in Didot" (i.e., point size). Verhelst further teaches a baseline coordination mode in column 10 lines 39-47, discussing document layout based upon a baseline.

Regarding claims 6-7, Verhelst discloses the calculation of character size including ascender and descender values in the passage at column 12 line 65 – column 13 line 21. It is noted that the font size, such as discussed at column 12 lines 53-58, implicitly includes the vertical and horizontal dimensions of a character.

Art Unit: 2162

Claims 8-14 are directed to the method implemented by a processor using the computer program product of claims 1-7. As such, these claims are substantially similar to claims 1-7, respectively, and therefore likewise rejected.

Independent claim 15 states:

A desktop publishing system for controlling forced grid line spacing, comprising:

a desktop publishing processing control device provided with a font file, the font file storing character font information for performing typesetting, and with typesetting control means having a control means for forced grid line spacing;

*a display device displaying data being typeset; and
input means for user input;*

the control means for forced grid line spacing being arranged to:

determine whether a maximum dimension of a plurality of characters to be arranged according to a selected coordination mode within a current line of a grid displayed on the display device exceeds a specified dimension of the grid;

select a current grid line and at least one subsequent grid line; and

arrange the plurality of characters within an arrangement space demarcated by the selected plurality of grid lines without modifying the displayed grid, based on the coordination mode.

Regarding claim 15, Verhelst discloses a desktop publishing system for grid line spacing in the Abstract, discussing a desktop publishing system for preparing and managing documents, including grid line spacing, in the context of column 13 lines 7-11, discussing font class property data, and column 13 lines 31-38, discussing a control means for changing grid pattern. Verhelst discloses a display means for typeset data in Figures 1a and 1b, showing a display device (see Fig. 1a #2 and Fig. 1b #2), in the

Art Unit: 2162

context of Figure 12, showing a grid layout. Verhelst discloses a user input means in Figures 1a and 1b, showing keyboard and mouse devices (see Fig. 1a #3 and 4, and Fig. 1b #3 and 4). Verhelst discloses determining the height of text arranged/displayed in the grid of Figure 12, illustrating text and grid lines of differing point size, in the context of the discussion on ascender and descender values for character fonts in column 12 line 65 – col. 13 line. Verhelst further shows adjusting grid line spacing based upon a dimension threshold in Figure 12, showing a variation in grid line spacing, as taken in context of the discussion of column 13 lines 14-29 concerning adjusting grid line spacing based upon the equation set forth at column 12 line 67 – column 13 line 7. Verhelst teaches selecting coordination modes at column 13 lines 30-38, discussing the setting a “base line grid” property. Verhelst further teaches the arrangement of a plurality of characters in association with a coordination line in Figure 12, showing the arrangement of text in association with grid lines (i.e., baselines), noting that Verhelst took into account ascender and descender values (i.e., character height above/below a baseline) for character fonts in col. 12 lines 65-67.

However, Verhelst does not explicitly disclose demarcating a region comprising at least two lines (i.e., current line plus at least one subsequent line) in Figure 12. Hollett, though, teaches demarcating a text region encompassing at least two lines in Figure 4, showing, for example, text region 4 encompassing three lines. Additionally, Hollett discusses calculating a text region extending 10 characters up/down at column 4 lines 11-23, it being noted that each vertically arranged (i.e., up/down) character equates to a line. The area demarcated for “TEXT3” shows that a total of 3 lines have

Art Unit: 2162

been used, a current plus two subsequent lines, to demarcate a grid region to accommodate the larger height of "TEXT3" (when contrasted to the height of "TEXT4"). It is further noted that since the grid cells/lines are transparent that no modification of the grid itself was necessary.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hollett for the benefit of Verhelst, because to do so would have allowed one to automatically draw blocks of text to an optimum size, as taught by Hollett in the Abstract. These references were all applicable to the same field of endeavor, i.e., electronic document formatting.

Independent claim 16 is directed to the method implemented by the system of claim 15. As such, this claim is substantially similar to claim 15, and therefore likewise rejected.

Conclusion

11. **THIS ACTION IS MADE NON-FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


Art Unit: 2162

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Robert Stevens
Examiner
Art Unit 2162

January 12, 2007


SHAHID ALAM
PRIMARY EXAMINER